

**CLAIMS:**

**WHAT IS CLAIMED IS:**

1. (Currently Amended)     An apparatus ~~A mobile station MS~~ comprising:
  - an interface configured to receive a media sample;
  - a processor configured to extract a first set of features from a digital version of the media sample;
  - a transmitter configured to transmit the extracted first set of features over a wireless communication link,
  - a receiver configured to receive over the wireless communication link a request message that requests at least one additional feature that is a higher order extraction not directly extracted from the media sample itself;
  - wherein the processor is further configured to respond ~~automatically responsive~~ to the request message to extract a second set of features from the digital version of the media sample and to transmit the extracted second set of features.
2. (Currently Amended)     The apparatus ~~The MS~~ of claim 1 wherein the interface comprises a transducer.
3. (Currently Amended)     The apparatus ~~The MS~~ of claim 2 wherein the transducer comprises a microphone and the media sample comprises an audio sample.
4. (Currently Amended)     The apparatus ~~The MS~~ of claim 2 wherein the transducer comprises a camera and the media sample comprises a visual sample.
5. (Currently Amended)     The apparatus ~~The MS~~ of claim 1 wherein the interface comprises one of a cable and a wireless link.
6. (Currently Amended)     The apparatus ~~The MS~~ of claim 5 wherein the media sample that the interface receives is the digital version.

7. (Currently Amended)     The apparatus ~~The MS~~ of claim 1 wherein said transmitter is further configured to transmit a message that includes the at least one extracted feature and no portion of the digital version of the media sample.

8. (Currently Amended)     The apparatus ~~The MS~~ of claim 1 wherein the processor is further configured to adaptively select a number of features to extract based on the digital version of the media sample.

9. (Currently Amended)     The apparatus ~~The MS~~ of claim 1 wherein the processor is further configured to adaptively select at least one type of feature to extract based on the digital version of the media sample, the processor extracts at least one feature of the adaptively selected type, and wherein the transmitter is further configured to transmit an identifier of the selected type of feature.

10-11.(Canceled)

12. (Currently Amended)     The apparatus ~~The MS~~ of claim 1 further comprising a user interface configured to cause ~~for causing~~ the transmitter to transmit the first set of features, and a buffer configured to store at least a portion of the digital version of the media sample, wherein the processor extracts at least some of the first set prior to a user input at the said user interface.

13-15.(Canceled)

16. (Currently Amended)     The apparatus ~~The MS~~ of claim 1 further comprising a user interface by which a single user input initiates: the processor to extract the first set of features, a wireless communications link to be established between the MS and a communication service, and the extracted first set of features to be transmitted over the wireless communications link.

17. (Currently Amended)     The apparatus ~~The MS~~ of claim 16 wherein the single user input further initiates a buffer disposed between the transducer and the processor to begin storing at least a portion of the digital version of the media sample.

18. (Currently Amended) The apparatus ~~The MS~~ of claim 1 wherein the first and second sets of features comprise MPEG-7 descriptors.

19. (Currently Amended) The apparatus ~~The MS~~ of claim 1 wherein the first set of features is non-reconstructive of the digital version of the media sample.

20. (Currently Amended) The apparatus ~~The MS~~ of claim 1 wherein the first and second sets of features, in combination, are non-reconstructive of the digital version of the media sample.

21. (Canceled)

22. (Currently Amended) The apparatus ~~The MS~~ of claim 1, wherein the request message specifically identifies each additional feature at least by type, and the second set of features comprises only features of the said identified type.

23. (Currently Amended) A computer readable medium embodied with a computer program ~~A computer program, embodied on a computer readable medium within a mobile station, to process a media sample~~ comprising:

a first set of computer instructions to extract in response to a user input a first set of features from a digital media sample, and to extract in response to a received request message, through wireless communications, a second set of features consistent with at least one additional feature requested in the request message, wherein the at least one additional feature is a higher order extraction not directly extracted from the media sample itself; and

a second set of computer instructions to transmit in separate messages the first and second sets of extracted features over a wireless communications link.

24. (Currently Amended) The computer readable medium ~~The computer program~~ of claim 23 wherein said separate messages comprise features but no portion of the digital media sample.

25. (Currently Amended) The computer readable medium ~~The computer program~~ of claim 23 wherein the request message specifies a number of additional features, and the first

set of computer instructions is to adaptively select the second set of features comprising the specified number.

26. (Currently Amended) The computer readable medium ~~The computer program~~ of claim 23 wherein

the first set of computer instructions is to adaptively select a type of feature to extract based on the request message and to extract the first set of features of the adaptively selected type.

27. (Currently Amended) The computer readable medium ~~The computer program~~ of claim 23 wherein

the first set of computer instructions is to extract the first set of features from a first time-bounded segment of the digital media sample, and

the second set of computer instructions is to transmit a second time-bounded segment and not the first time-bounded segment with the first set of features.

28-29.(Canceled)

30. (Currently Amended) The computer readable medium ~~The computer program~~ of claim 23 wherein the at least one feature defines a timepoint, the first set of computer instructions is to extract at least one timepoint from the digital media sample, and one of said messages comprises a timepoint, a spectral slice of the digital media sample and an identifier that links the spectral slice to the timepoint.

31-34.(Canceled)

35. (Currently Amended) The computer readable medium ~~The computer program~~ of claim 23 wherein the first set of features is non-reconstructive of that digital media sample.

36.(Canceled)

37. (Currently Amended) A computer readable medium embodied with a computer program ~~A computer program embodied on a computer readable medium to uniquely match a plurality of extracted features to a feature set stored in a database~~ comprising:

a first set of computer instructions to receive over a network a first message that includes a first set of received features;

a second set of computer instructions to search a database of feature sets for all matching sets that match the first set of received features and to determine at least one additional feature that distinguishes among each of the matching sets, wherein the at least one additional feature is a higher order extraction not directly extracted from the media sample itself;

a third set of computer instructions to transmit over the network a request message that stipulates the at least one additional feature, the first set of computer instructions further to receive over the network a second message that includes a second set of received features in response to the request message that stipulates the at least one additional feature; and

a fourth set of computer instructions to uniquely identify one feature set from among the matching sets using the second set of received features.

38. (Currently Amended) The computer readable medium ~~The computer program~~ of claim 37 wherein each feature set is associated with a media file title, the computer program further comprising a fifth set of computer instructions to transmit, over the network to a sender of the message, a reply message that includes the media file title.

39.(Canceled)

40. (Currently Amended) The computer readable medium ~~The computer program~~ of claim 38 wherein the fourth set of computer instructions further is to determine a link address for a media file uniquely associated with the uniquely identified feature set, and wherein the fifth set of computer instructions is further to transmit the link address in the reply message.

41-46.(Canceled)

47. (Currently Amended) The computer readable medium ~~The computer program~~ of claim 37 wherein the request message includes at least one of a number of additional features and a type of the at least one additional feature.

48. (Currently Amended) An apparatus ~~A mobile station~~ comprising:  
means for receiving a media sample;

processing means for extracting at least one feature from a digital version of the media sample, said processing means responsive to a user input to extract a first set of features and responsive to a request message identifying at least one additional feature to extract a second set of features consistent with the identified at least one additional feature that is a higher order extraction not directly extracted from the media sample itself;

means for transmitting the first and second sets of features in separate messages over a wireless communication link; and

means for receiving the request message through wireless communications.

49.(Previously Presented) The mobile station of claim 48, wherein the means for receiving a media sample comprises a transducer, and the means for extracting comprises a digital processor.

50.(Currently Amended) ~~A method for signaling information about a media file to a remote database, comprising:~~

at a portable wireless device, receiving a media sample;

at the portable wireless device, extracting a first plurality of features from a digital version of the media sample;

transmitting from the portable wireless device a message that includes the extracted first plurality of features;

receiving at the portable wireless device a request message requesting at least one additional feature that is a higher order extraction not directly extracted from the media sample itself;

at the portable wireless device, extracting at least one extra feature consistent with the request message; and

transmitting from the portable wireless device a message that includes the extracted extra feature.